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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,490	09/12/2003	Noriko Tomita	OHG 135	6341
23995	7590	06/15/2006	EXAMINER	
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			LUU, CHUONG A	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/660,490	Applicant(s) TOMITA ET AL.	
	Examiner Chuong A. Luu	Art Unit 2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 19-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

REJECTION NOT BASED UPON PRIOR ART

Statutory Basis

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 and 19-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly amended limitations "leaving the substrate to stand in air containing ambient organic substances, the air being at a low temperature lower than the boiling point....the ambient organic substances..." of the independent claims do not support in the specification.

PRIOR ART REJECTIONS

Statutory Basis

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2818

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The Rejections

Claims 1-3, 6-9, 12 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Minoru et al. (JP07-275813).

Minoru discloses a cleaning device with

(1) washing a semiconductor substrate so as to make the surface clean (see paragraphs [0007]-[0008]);

depositing a high molecular straight-chain organic compound, having a boiling point lower than the temperature of heat treatment of the wafer processing of the subsequent step, onto the clean surface of said semiconductor substrate during or after washing of said semiconductor substrate (see paragraphs [0009]-[0013] and [0044]-[0047]);

(2); (8) wherein said high molecular straight-chain organic compound is selected from substances of lower boiling point than 500°C (see paragraphs [0044]-[0047]);

(3); (9); (25) wherein said high molecular straight-chain organic compound of a single type (see paragraphs [0044]-[0047]);

(6); (12) wherein, after deposition of said high molecular straight-chain organic compound onto the surface of the semiconductor substrate, said high molecular straight-chain organic compound further eliminated by the heat treatment temperature (see paragraphs [0044]-[0047]);

(7); (23) washing a semiconductor substrate (see paragraphs [0007]-[0008]);

depositing a high molecular straight-chain organic compound having a boiling point lower than the temperature of heat treatment of the wafer processing of the subsequent step onto the surface of said semiconductor substrate by spin coating which liquid containing the high molecular straight-chain organic compound and pure water discharged from a spray nozzle while rotating the semiconductor substrate during or after washing of the semiconductor substrate (see paragraphs [0009]-[0013] and [0043]-[0047]);

(22) comprising keeping the substrate in a clean room containing ambient organic compounds having a molecular weight lower than that of the high molecular straight-chain organic compound (see paragraphs [0009]-[0013] and [0044]-[0047]);

(24) wherein the straight-chain organic compound does not contain unsaturated bonds (see paragraphs [0009]-[0013] and [0044]-[0047]).

PRIOR ART REJECTIONS

Statutory Basis

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The Rejections

Claims 4-5 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minoru et al. (JP07-275813) in view of Shimizu et al. (U.S. 5,827,444).

Minoru discloses the claimed invention except for the high molecular straight-chain organic compound is cholesterol ($C_{27}H_{46}O$) and behenic acid ($C_{21}H_{43}COOH$). However, Shimizu discloses a magnetic fluid with **(4); (5); (10); (11)** wherein the high molecular straight-chain organic compound is cholesterol ($C_{27}H_{46}O$) and behenic acid ($C_{21}H_{43}COOH$) (see column 4, lines 1-4; column 2, lines 49-51). It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the suitable materials to achieve its objective, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minoru et al. (JP07-275813) in view of Shinozaki (U.S. 6,432,481 B1).

Minoru teaches the above outlined features except for wherein the subsequent step includes one of thermal oxidation and reduced pressured CVD. However, Shinozaki discloses a recording material wherein heating causes surface tension inclination with **(19); (20)** wherein the subsequent step includes one of thermal oxidation and reduced pressured CVD (see column 23, lines 59-67 and column 24, lines 1-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the suitable materials to achieve its objective, since it has been held

to be within the general skill of a worker in the art to select a known process on the basis of its suitability for the intended use as a matter of obvious design choice.

Response to Arguments

Applicant's arguments filed April 3, 2006 have been fully considered but they are not persuasive.

Applicant argues that JP'813 does not disclose polyorganosiloxane as being applied after washing. However, The newly amended limitations "leaving the substrate to stand in air containing ambient organic substances, the air being at a low temperature lower than the boiling point.....the ambient organic substances..." of the independent claims do not support in the specification.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

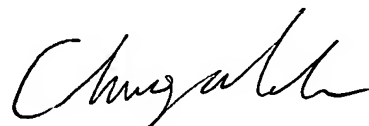
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong A. Luu whose telephone number is (571) 272-1902. The examiner can normally be reached on M-F (6:15-2:45).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chuong Anh Luu
Patent Examiner
June 7, 2006